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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/809,205	03/25/2004	Toshimitsu Hirai	9319S-000717	5980

27572 7590 06/18/2007
HARNESS, DICKEY & PIERCE, P.L.C.
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EXAMINER

TALBOT, BRIAN K

ART UNIT	PAPER NUMBER
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1762

MAIL DATE	DELIVERY MODE
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06/18/2007

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/809,205

Applicant(s)

HIRAI, TOSHIMITSU

Examiner

Brian K. Talbot

Art Unit

1762

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 4/5/07(RCE).
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-3,5-7,10 and 11 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-3,5-7,10 and 11 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- ☒ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☒ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date 1/8/07 and 4/30/07.
- ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- ☐ Notice of Informal Patent Application
- ☐ Other: _____

Continued Examination Under 37 CFR 1.114

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 4/5/07 has been entered.
2. Claims 4,8,9 and 12-20 have been canceled. Claims 1-3,5-7,10 and 11 remain in the application.
3. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.
4. In light of the amendment filed 4/5/07 8/23/06, the 35 USC 103 rejections over Banno et al. (6,761,925) (a) alone or (b) in combination with Applicant's admitted state of the art, specification, pg. 2 [0006] and JP 09-245,689 in combination with Applicant's admitted state of the art, specification, pg. 2 [0006] have been withdrawn.

Claim Rejections - 35 USC § 103

Art Unit: 1762

5. Claims 1-3,5-7,10 and 11 are rejected under 35 U.S.C. 103(a) as being unpatentable over Motoi et al. (6,017,259) in combination with Banno et al. (6,761,925).

Motoi et al. (6,017,259) teaches a method of manufacturing electron-emitting device, electron source and image-forming apparatus. The electron emitting device is manufactured by applying an ink containing a material for producing the electroconductive film to a predetermined position of the substrate in the form of one or more drops by an ink jet apparatus, drying and baking to form the electroconductive film. Applying a voltage to the electrodes to produce and electron emitting region (abstract). Looking at Figs. 3A and 3B, Dots (4-1,4-2 and 4-3) are applied between the pair of electrodes (2,3). Ink A was applied to form the dots (4-1 and 4-3) while Ink B was applied to form the center column (4-2) (pg. 11, line 63 – col. 12, line 42 and example 2).

Motoi et al. (6,017,259) fails to teach forming the line pattern by forming the dots in a line with a “space interval therebetween” and filling these “spaced intervals” with a second set of drops to form the line segment.

Banno et al. (6,761,925) reference teaches that film droplets can be deposited in an arbitrary order and that "dots may be deposited at every other dot locations first, and then a dot may be further deposited in each space." (col. 37, lines 34 – 39).

Therefore it would have been obvious for one skilled in the art at the time the invention was made to have modified Motoi et al. (6,017,259) process by forming the side and center regions by depositing dots at every other dot location and then depositing in the space formed between the dots as evidenced by Banno et al. (6,761,925) with the expectation of achieving similar success.

Response to Amendment

6. Applicant's arguments with respect to claims 1-3,5-7,10 and 11 have been considered but are moot in view of the new ground(s) of rejection.

Applicant argued that the prior art fails to teach forming the periphery portion of the film prior to the interior portion of the film.

Motoi et al. (6,017,259) clearly teaches this feature as detailed above.

Applicant argued that the prior art fails to teach forming the dots at every other location and then forming the dots at the spaced areas formed by the first set of dots.

Banno et al. (6,761,925) clearly teaches this feature as detailed above.

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Brian K. Talbot whose telephone number is (571) 272-1428. The examiner can normally be reached on Monday-Friday 8AM-4PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Timothy H. Meeks can be reached on (571) 272-1423. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 1762

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

BKTalbot 6/13/07

Brian K Talbot
Primary Examiner
Art Unit 1762

BKT